

DISPENSE TIP WITH VENTED OUTLETS

Abstract of the Disclosure

5 In a fluid pump and cartridge assembly, a cartridge includes a material inlet port, a
material outlet port, and a feed screw. The feed screw delivers fluid to be dispensed from the
fluid inlet to the outlet port. The fluid inlet is preferably elongated in a direction along a
longitudinal axis of the feed screw to enhance consistency in material flow through the
cartridge. The feed screw is preferably driven by a closed-loop servo motor to achieve high-
performance dispensing resolution. The assembly is preferably compatible with fixed-z and
floating-z cartridges. A optional vented dispense tip, in combination with the fluid pump,
10 allows for repeatable deposit of fillet patterns while maintaining optimal consistency.

J:\BRD\0002CIP\0002cippatapp3.wpd